35 U.S.C. §112 Rejection

Claims 1-42 have been rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is alleged that the use of the term "substantially" in the phrase "substantially excludes acidulent components" renders the claims indefinite.

Applicant respectfully traverses this rejection. The use of relative terminology, such as the word "substantially," is widely accepted and does not automatically render a claim indefinite. Acceptability of the relative terminology in the claim language depends on whether one having ordinary skill in the art would understand the scope of the claims. Guidance on the meaning of the term "substantially" can be discerned from an examination of the specification. The Background of the Invention section (hereinafter "Background") of the specification the recognizes the problem that many individuals are sensitive to highly acidic foods and beverages. The present invention, therefore provides a water-soluble, edible, acidity-reducing formulation to raise the pH of acid containing foods and beverages prior to consumption of the food or beverage product. If acidulent materials are excluded from the acidity-reducing formulation, then it is easier to raise the pH of an acidic food or beverage product to a desirable level.

One having ordinary skill in the art would appreciate that it would be undesirable to include a substantial amount of acidulent materials in an acidity-reducing formulation, as this would tend to increase the acidity (lower the pH) of the formulation. Accordingly, from the guidance provided by the specification, Applicant respectfully submits that one having ordinary skill in the art would easily understand that the phrase "substantially excluding acidulent components" refers to a formulation which does not contain any acidulent materials, or which may contain acidulent materials at such a level so as not to alter the pH of the formulation relative to what the pH would be without the inclusion of acidulent materials. Thus, Applicant respectfully submits that claims 1-42 are clear and precise to one of ordinary skill in the art. Applicant, therefore, respectfully requests withdrawal of the 35 U.S.C. §112 rejection of claims 1-42.

35 U.S.C. §102(b) Rejection

Claims 1-3, 6-9 and 12 have been rejected under 35 U.S.C. §102(b) as being anticipated by United States Patent No. 4,744,986 to Luber et al. It is specifically alleged that Luber et al disclose an antacid composition containing a bicarbonate, a soluble binder, a preservative and no acidulents.

Applicant respectfully traverses this rejection. The Luber et al reference discloses a process for preparing an aqueous antacid composition. The process includes forming a reaction product of an aqueous alginic acid salt and an antacid material, by heating the mixture of aqueous alginic acid salt and the antacid material to an elevated temperature to form the stable reaction product. The antacid composition of Luber et al is not intended to be added to a food or beverage prodiuct to reaise the pH of the food or beverage product before consumption by an individual. Rather, the antacid composition of Luber et al is specifically designed to be ingested by an individual to treat gastric reflux. Once ingested, the antacid composition reacts with the acidic gastric contents of the stomach to form a rigid or semi-rigid gel matrix, which floats on the surface of the stomach contents, thereby preventing gastric reflux of stomach acid into the esophagus. In order to float, the composition of Luber et al must contain sufficient gas producing material to produce sufficient gas, when exposed to the acid medium of the stomach, to make the foam float, and the foam must absorb the gas so produced. The rafting antacid disclosed in Luber et al, which forms a semi-rigid or rigid gelatinous mass, is not usable as an additive for food or beverage products prior to consumption, as it would clearly alter the taste and consistency of the food or beverage product. Clearly, the composition of Luber et al is intended to be ingested by an individual either before, or more likely, after the consumption of highly acidic foods and beverages to counteract the gastric reflux caused by ingestion of such highly acidic foods and beverages.

By contrast, the present invention provides an acidity-reducing formulation that is capable of reducing the acidity of food and beverage products prior to consumption. The formulation is intended to be added to a highly acidic food or beverage product to raise the pH of the food or beverage product to a desired level, prior to consumption of the food or beverage product. The formulation of the present invention, when added to food or beverage prior to

consumption, does not alter the taste, odor, or consistency of the food or beverage product. In contrast to Luber et al, the acidity-reducing formulation is not intended to be ingested by an individual prior to, or after the consumption, of highly acid foods to treat gastrix reflux. In fact, by utilizing the acidity-reducing formulation to neutralize highly acidic foods prior to consumption, the necessity of using a customary antacid before or after consumption of highly acidic foods or beverages ca be avoided. There is no disclosure in Luber et al for the provision of an acidity-reducing formulation that is added to food and beverage product **prior** to consumption. Applicant, therefore, submits that Luber et al does not anticipate the formulation of claims 1-3, 6-9 and 12. Accordingly, Applicant requests withdrawal of the 35 U.S.C. §102(b) rejection.

35 U.S.C. §103(a) Rejection

Claims 1-4 and 6 have been rejected under 35 U.S.C. §103(a) as being unpatentable over United States Patent No. 5,350,591 to Canton for the same reasons set forth in the Office Action dated June 6, 2002. The June 6, 2002 Office Action states that claims 1-4 and 6 were rejected for the reasons of record in the Office Action dated December 17, 2001. In the December 17, 2001 Office Action, it was specifically alleged that Canton discloses a solid composition containing a bicarbonate, a binder and no acidulent. With respect to claims 4 and 6, it was specifically alleged that it would have been obvious to use sodium benzoate and potassium sorbate as preservatives in the liquid product.

Applicant respectfully traverses the rejection of claims 1-4 and 6 in view of Canton. As stated in Applicant's previous, Canton discloses a dry, powdered foaming additive for hot coffee beverages. See Abstract; col. 1, lines 6-10; col. 3, lines 30-34; col. 3, lines 55-65; col. 4, lines 39-45; Example Nos. 1-3; claims 1-20. The objective of the Canton invention is to provide a dry powder coffee additive that produces a foam head having a skin on the top surface of the hot coffee. The additive reproduces the foam head and skin of traditionally prepared espresso. The foamed head is intended to closely resemble the color, taste, aroma and longevity of steam generator prepared espresso drink. Canton requires the use of a specific two component releasing agent, in

the solid composition. The first component of the two-part releasing agent is selected from the group consisting of monocalcium phosphate, fumaric acid, and citric acid. Two of the three inventive examples of Canton clearly disclose the use of fumaric acid (Example 2) and citric acid (Example 3).

An acidulent is defined in the food technology industry as any of a variety of chemicals added to a food product to increase its tartness or acidity. *See* Academic Press Dictionary of Science and Technology, 1992, p. 24 (copy enclosed). It is well known in the art that fumaric and citric acids are organic acidulents, which, when added to a composition would increase the acidity of the composition. Canton also discloses monocalcium phosphate as an alternative choice for the first component of the two-component releasing agent. Applicant submits that it is known that aqueous solutions of monocalcium phosphate are acidic. *See* Hawley's Condensed Chemical Dictionary, 12th Ed, p. 206 (copy enclosed). One of the most common uses of monocalcium phosphate in the food technology industry is as an acidulent for foods and beverages to impart acidity to the food or beverage. See internet web page print-out from www.rotel.com.tr/site/phosphates (copy enclosed). Canton does not provide any teaching or suggestion that the first component of the two-part releasing agent can be selected from non-acidulent materials. Applicant, therefore, respectfully requests withdrawal of the rejection of claims 1-4 and 6.

The Canton reference is strictly limited to a dry powder food additive, whereas the present invention is directed to a liquefied, water soluble acidity-reducing formulation. There is no teaching, suggestion or motivation in Canton for the provision of a **liquefied** food additive. Accordingly, Applicant submits that claims 1-4 and 6 are clearly distinguishable from, and patentable over, the dry powdered additive of Canton. Applicant, therefore, respectfully requests withdrawal of the rejection of claims 1-4 and 6.

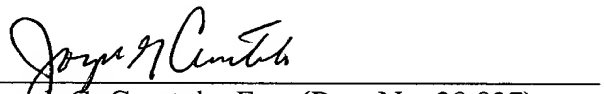
Claim 10 has been rejected as obvious under 35 U.S.C. §103(a) over the Luber et al reference. It is alleged that Luber et al disclose the use of parabens as preservatives, and that it would have been obvious to substitute sorbates or benzoates for the parabens. The foregoing

arguments demonstrate that claims 1-4 and 6 are patentable over Luber et al. While Luber et al disclose the use of parabens as a preservative, the teachings Luber et al, nonetheless, still require inclusion of acidulent components, such citric acid, fumaric acid and monocalcium phosphate, as the first component of the two-part releasing agent component of the food additive. The formulation of the present invention does not contain any acidulent materials, or contains so little acidulent materials so as not to alter the pH of the formulation relative to what the pH would be without the inclusion of acidulent materials. There is no suggestion or motivation provided in Luber et al to provide an acidity-reducing formulation that is substantially devoid of acidulent components. Applicant, therefore, respectfully requests withdrawal of the rejection of claim 10.

In view of the arguments presented above, Applicant respectfully requests the withdrawal of the rejections based on 35 U.S.C. § 102(b), §103(a) and §112. Applicant also earnestly solicits the issuance a Formal Notice of Allowability directed to claims 1-42.

Should the Examiner have any questions, Applicant's undersigned attorney would welcome a telephone call.

Respectfully submitted,



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